

IN THE CLAIMS

Please amend the Claims as follows:

1. (Currently Amended) A coating composition comprising one or more corrosion-inhibiting carbon pigments in an effective corrosion-inhibiting amount ~~of a corrosion-inhibiting carbon pigment~~; and
one or more binders ~~a binder~~.
2. (Currently Amended) The coating composition of claim 1 wherein at least one of the one or more corrosion-inhibiting carbon-pigment pigments is a surface-modified corrosion-inhibiting carbon pigment.
3. (Currently Amended) A The coating composition of claim 1 further comprising ~~an effective corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment; and~~ one or more extenders selected from the group consisting of a neutral to slightly acidic generating extender, ~~or~~ an acidic generating extender, and combinations thereof.
4. (Currently Amended) A The coating composition of claim 1 further comprising ~~an effective corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment; and~~
an one or more amino-acid acids.
5. (Currently Amended) A The coating composition of claim 1 further comprising ~~an effective corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment; and~~
~~at least one~~ one or more rare earth-compound compounds.
6. (Currently Amended) A The coating composition of claim 1 further comprising ~~an effective corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment;~~
~~at least one~~ one or more extenders selected from the group consisting of a neutral to

BEST AVAILABLE COPY

RESPONSE TO RESTRICTION REQUIREMENT

Serial Number: 10/758,973

Filing Date: January 16, 2004

Title: CORROSION RESISTANT COATINGS CONTAINING CARBON

Page 3

Dkt: 423.021US1

slightly acidic generating extender, ~~or~~ an acidic generating extender, and combinations thereof;
and ~~at least one~~ one or more rare earth ~~compound~~ compounds.

7- 8. (Canceled)

9. (Currently Amended) The coating composition of claim ~~8~~ 2 wherein the surface-modified corrosion-inhibiting carbon pigment is an inorganic dispersed carbon black.

10. (Currently Amended) The coating composition of claim ~~8~~ 2 wherein the surface-modified corrosion-inhibiting carbon pigment is a resin-dispersed carbon black or a surfactant-dispersed carbon black.

11. (Currently Amended) The coating composition of ~~7~~ claim 1 wherein at least one of the one or more corrosion-inhibiting carbon pigments is a conductive carbon pigment ~~or a non-~~
~~conductive carbon pigment~~.

12. (Currently Amended) The coating composition of claim ~~7~~ 1 wherein at least one of the one or more corrosion-inhibiting carbon pigments is selected from the group consisting of acetylene black, channel black, furnace black, lamp black, thermal black, bone black and combinations thereof.

13. (Currently Amended) The coating composition of claim ~~7~~ 1 wherein at least one of the one or more corrosion-inhibiting carbon pigments is an elemental form of carbon.

14. (Currently Amended) The coating composition of claim ~~7~~ 1 wherein at least one of the one or more corrosion-inhibiting carbon pigments is an amorphous form of carbon.

15. (Currently Amended) The coating composition of claim ~~7~~ 1 wherein at least one of the one or more corrosion-inhibiting carbon pigments is a carbon-containing mixture.

16. (Currently Amended) The coating composition of claim 7 1 wherein the one or more corrosion-inhibiting carbon pigments are added present in the composition in a weight percent range of between about 0.1 to about 100% of total pigment concentration.
17. (Currently Amended) The coating composition of claim 7 1 wherein the coating composition has a pigment volume concentration of between about 5 to about 55.
18. (Currently Amended) The coating composition of claim 7 1 wherein at least one of the one or more binder binders is an organic binder ~~or inorganic binder~~.
19. (Currently Amended) The coating composition of claim 7 1 wherein at least one of the one or more binder binders is an epoxy-based resin binder.
20. (Currently Amended) The coating composition of ~~any of~~ claim 19 wherein the epoxy-based resin binder is an amine-cured epoxy-based resin binder.
21. (Currently Amended) The coating composition of claim ~~20~~ 19 wherein the epoxy-based resin binder is a water reducible epoxy-polyamide system.
22. (Currently Amended) The coating composition of claim 7 1 wherein at least one of the binder one or more binders is a non epoxy-based resin binder.
23. (Currently Amended) The coating composition of claim 22 wherein the non epoxy-based resin binder is an organic resin binder selected from the group consisting of urethanes, ureas, acrylates, alkyds, melamines, polyesters, vinyls, vinyl esters, organo-silicones, organo-siloxanes, organo-silicates, organo-sulfides, organo-sulfones, ~~epoxy novilacs~~, ~~epoxy phenolics~~, drying oils, hydrocarbon polymers, and combinations thereof.
24. (Currently Amended) The coating composition of claim 7 3 wherein at least one of the one or more ~~neutral to slightly acidic generating extenders or acidic generating extender~~ extenders is

a sulfur, phosphorus or silicon oxyanion-containing compound.

25. (Currently Amended) The coating composition of claim 24 wherein the sulfur, phosphorus or silicon oxyanion-containing compound is selected from the group consisting of a metal cation sulfate, a metal cation sulfite, a metal cation sulfonate, a metal cation ~~protonated~~ hydrogen phosphate, a metal cation phosphate, a metal cation phosphonite, an oxyphosphate, a clay mineral kaolin and combinations thereof.

26. (Currently Amended) The coating composition of claim 7 3 wherein at least one of the one or more ~~neutral to slightly acidic generating extenders or one or more acidic generating extender extenders~~ is calcium sulfate, calcium hydrogen sulfate, calcium phosphate, protonated calcium hydrogen phosphate, calcium di-hydrogen phosphate or combinations thereof.

27. (Currently Amended) The coating composition of claim 7 3 wherein the one or more ~~neutral to slightly acidic generating extenders or one or more acidic generating extenders~~ are added present in the composition in a weight percent of between about 45% to about 75% of total pigment concentration.

28. (Currently Amended) The coating composition of claim 7 1 further comprising one or more corrosion co-inhibitors.

29. (Canceled)

30. (Currently Amended) The A coating composition of claim 2 further comprising:

~~a binder;~~

~~a surface modified corrosion inhibiting carbon pigment; and~~

one or more extenders selected from the group consisting of a neutral to slightly acidic generating extender, an extenders or one or more acidic generating extenders extender, and combinations thereof.

31. (Original) The coating composition of claim 30 wherein the surface-modified corrosion-inhibiting carbon pigment is an inorganic dispersed carbon black.

32. (Original) The coating composition of claim 30 wherein the surface-modified corrosion-inhibiting carbon pigment is a resin-dispersed carbon black or a surfactant-dispersed carbon black.

33. (Currently Amended) Previously Presented) The coating composition of claim 30 wherein at least one of the one or more ~~neutral to slightly acidic generating extenders or acidic generating extender~~ extenders is an a sulfur, phosphorus or silicon oxyanion salt selected from the group consisting of a metal cation sulfate, a metal cation hydrogen sulfate, a metal cation sulfite, a metal cation hydrogen sulfite, a metal cation sulfonate, a metal cation protonated hydrogen phosphate, a metal cation phosphate, a metal cation di-hydrogen phosphate, a metal cation phosphonite, an oxyphosphate, a clay mineral kaolin and combinations thereof.

34. (Currently Amended) The coating composition of claim 30 wherein the one or more neutral to slightly acidic generating extenders or one or more acidic generating extenders are added present in the composition in a weight percent of between about ~~45% to about 75%~~ 25% to 98% of total pigment concentration.

35. (Currently Amended) The coating composition of claim 30 wherein at least one of the one or more binder binders is an ~~amine-cured~~ epoxy-based resin binder.

36. (Currently Amended) The coating composition of claim 30 further comprising one or more corrosion co-inhibitors.

37. (Currently Amended) The coating composition of claim 36 wherein at least one of the one or more corrosion co-inhibitors is a rare earth compound.

38. (Currently Amended) The A coating composition of claim 3 further comprising:

~~a binder;~~
~~a corrosion-inhibiting carbon pigment;~~
~~one or more neutral to slightly acidic-generating extenders or one or more acidic-generating extenders; and~~
one or more corrosion co-inhibitors, wherein at least one of the one or more corrosion co-inhibitors is a rare earth compound.

39. (Currently Amended) The coating composition of claim 38 wherein the rare earth compound is a salt of a rare earth-containing compound selected from the group consisting of[[.]] a hydroxide of a rare earth-containing compound, an oxide of a rare earth-containing compound, a solid solution mixed oxide of a rare earth-containing compound, ~~or~~ and combinations thereof.

40. (Currently Amended) The coating composition of claim 38 wherein the rare earth compound is selected from the group consisting of cerium oxide, cerium hydroxide, cerium solid solution mixed oxide, cerium oxide mixture, cerium salt, neodymium oxide, neodymium hydroxide, ~~neodymium solid solution mixed oxide~~, neodymium oxide mixture, neodymium salt, praseodymium oxide, praseodymium hydroxide, praseodymium solid solution mixed oxide, praseodymium oxide mixture, praseodymium salt, ytterbium oxide, ytterbium hydroxide, ytterbium solid solution mixed oxide, ytterbium oxide mixture, ytterbium salt, yttrium oxide, yttrium hydroxide, ~~yttrium solid solution mixed oxide~~, yttrium oxide mixture, yttrium salt, terbium oxide, terbium hydroxide, terbium solid solution mixed oxide, terbium oxide mixture, terbium salt, and combinations thereof.

41. (Currently Amended) The coating composition of claim 38 wherein the rare earth compound is a praseodymium compound selected from the group consisting of a praseodymium solid solution mixed oxide, a praseodymium(III) oxide, a praseodymium(III) hydroxide, a praseodymium(IV) oxide, and combinations thereof.

42. (Currently Amended) The coating composition of claim 38 wherein at least one of the one or more corrosion-inhibiting carbon ~~pigment~~ pigments is a surface-modified corrosion-inhibiting

carbon pigment.

43. (Original) The coating composition of claim 42 wherein the surface-modified corrosion-inhibiting carbon pigment is an inorganic dispersed carbon black.

44. (Original) The coating composition of claim 42 wherein the surface-modified corrosion-inhibiting carbon pigment is a resin-dispersed carbon black or a surfactant-dispersed carbon black.

45. (Currently Amended) The coating composition of claim 38 wherein at least one of the one or more ~~neutral to slightly acidic generating extenders or acidic generating extender extenders~~ is a sulfur, phosphorus or silicon oxyanion salt selected from the group consisting of a metal cation sulfate, a metal cation hydrogen sulfate, a metal cation sulfite, a metal cation hydrogen sulfite, a metal cation sulfonate, a metal cation ~~protonated~~ hydrogen phosphate, a metal cation phosphate, a metal cation di-hydrogen phosphate, a metal cation phosphonite, an oxyphosphate, a clay mineral kaolin and combinations thereof.

46. (Currently Amended) The coating composition of claim 38 wherein the one or more extenders are ~~added~~ present in the composition in a weight percent of between about 45% to about 75% 25% to about 98% of total pigment concentration.

47. (Currently Amended) The coating composition of claim 38 wherein at least one of the one or more binder binders is an amine-cured epoxy-based resin binder.

48. (Currently Amended) The coating composition of claim 38 comprising at least two corrosion co-inhibitors.

49. (Currently Amended) The A coating composition of claim 1 further comprising:

a binder;

a corrosion-inhibiting carbon pigment; and

one or more corrosion co-inhibitors, wherein at least one of the one or more corrosion co-inhibitors is a rare earth compound.

50. (Currently Amended) The coating composition of claim 49 wherein at least one of the one or more corrosion-inhibiting carbon pigment pigments is a surface-modified corrosion-inhibiting carbon pigment.

51. (Original) The coating composition of claim 50 wherein the surface-modified corrosion-inhibiting carbon pigment is surface-modified carbon black.

52. (Currently Amended) The coating composition of claim 49 wherein the rare earth compound is a praseodymium compound selected from the group consisting of a praseodymium solid solution mixed oxide, a praseodymium(III) oxide, a praseodymium(III) hydroxide, ~~and a~~ praseodymium(IV) oxide, and combinations thereof.

53. (Currently Amended) The coating composition of claim 49 further comprising one or more extenders selected from the group consisting of a neutral to slightly acidic generating ~~extenders~~ or one or more extender, an acidic generating extender extenders, and combinations thereof.

54. (Currently Amended) The coating composition of claim 53 wherein at least one of the one or more ~~neutral to slightly acidic generating extenders or acidic generating extender~~ extenders is a sulfur, phosphorus or silicon oxyanion salt selected from the group consisting of a metal cation sulfate, a metal cation hydrogen sulfate, a metal cation sulfite, a metal cation hydrogen sulfite, a metal cation sulfonate, a metal cation ~~protonated~~ hydrogen phosphate, a metal cation phosphate, a metal cation di-hydrogen phosphate, a metal cation phosphonite, an oxyphosphate, a clay mineral kaolin and combinations thereof.

55. (Currently Amended) The coating composition of claim 49 wherein at least one of the one or more binder binders is an amine-cured epoxy-based resin binder.

RESPONSE TO RESTRICTION REQUIREMENT

Serial Number: 10/758,973

Filing Date: January 16, 2004

Title: CORROSION RESISTANT COATINGS CONTAINING CARBON

Page 10

Dkt: 423.021US1

56. (Currently Amended) The coating composition of claim 49 comprising at least two corrosion co-inhibitors.

57-58. (Canceled)

59. (Currently Amended) The coating composition of claim ~~58~~ 30 wherein the surface-modified corrosion-inhibiting carbon pigment is a surface-modified carbon black.

60. (Currently Amended) The coating composition of claim ~~57~~ 3 wherein at least one of the binder one or more binders is an ~~amine-cured~~ epoxy-based resin binder.

61. (Currently Amended) The coating composition of claim ~~57~~ 3 further comprising one or more corrosion co-inhibitors.

62. (Canceled)

63. (Currently Amended) A coating system comprising:

a coating composition according to claim 1 ~~containing an effective corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment~~ applied to a substrate.

64. (Currently Amended) The coating system of claim 63 wherein at least one of the one or more corrosion-inhibiting carbon pigment pigments is a surface-modified corrosion-inhibiting pigment.

65. (Currently Amended) The coating system of claim 63 wherein the system further comprises ~~comprising a topcoat and~~ one or more pretreatment coatings applied to the substrate to form a pretreated substrate and a topcoat.

66. (Original) The coating system of claim 65 wherein the topcoat is a urethane topcoat.

67. (Currently Amended) The coating system of claim 63 wherein at least one of the one or more binders coating system is a resin binder system.

68. (Currently Amended) The coating system of claim 63 wherein the coating system is composition is cured naturally or with an accelerated method of curing which exposes the coating composition to selected from the group consisting of heat a UV coating system, UV energy electrolytic coating system, appliqué, powder coating system, and microwave energy coating system, or combinations thereof.

69. (Currently Amended) The coating system of claim 63 wherein the substrate is coated by a method of application selected from the group consisting of spraying, brushing, rolling and dipping.

70. (Original) The coating system of claim 63 wherein the substrate is a composite substrate.

71. (Original) The coating system of claim 63 wherein the substrate is selected from the group consisting of aluminum, aluminum alloys, steel, galvanized steel, zinc, zinc alloys, magnesium, and magnesium alloys.

72. (Currently Amended) A coating system comprising:

one or more pretreatment coatings applied to a substrate to form a pretreated substrate;

and

a coating composition according to claim 1, the coating composition containing an effective corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment further comprising a one or more extenders selected from the group consisting of a neutral to slightly acidic generating extender, or an acidic generating extender, and combinations thereof, the coating composition applied to the pretreated substrate.

73. (Currently Amended) The coating system of claim 72 wherein at least one of the one or more corrosion-inhibiting carbon pigment pigments is a surface-modified corrosion-inhibiting

carbon pigment.

74. (Currently Amended) The coating system of claim 72 wherein the system further comprises including a topcoat.

75. (Original) The coating system of claim 74 wherein the topcoat is a urethane topcoat.

76. (Currently Amended) The coating system of claim 72 wherein at least one of the one or more binders coating system is a resin binder system.

77. (Currently Amended) The coating system of claim 72 wherein the coating ~~system is~~ composition is cured naturally or with an accelerated method of curing which exposes the coating composition to selected from the group consisting of heat a UV coating system, UV energy electrolytic coating system, appliqué, powder coating system, and microwave energy coating system, or combinations thereof.

78. (Currently Amended) The coating system of claim 72 wherein the pretreated substrate is coated by by a method of application selected from the group consisting of spraying, brushing, rolling and dipping.

79. (Original) The coating system of claim 72 wherein the pretreated substrate is a composite substrate.

80. (Original) The coating system of claim 72 wherein the substrate is selected from the group consisting of aluminum, aluminum alloys, steel, galvanized steel, zinc, zinc alloys, magnesium, and magnesium alloys.

81. (Currently Amended) A coating system comprising:

one or more pretreatment coatings applied to a substrate to form a pretreated substrate;
and a coating composition according to claim 1, the coating composition containing an effective

~~corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment~~ further comprising at least one or more rare earth compound compounds, the coating composition applied to the pretreated substrate.

82. (Currently Amended) The coating system of claim 81 wherein at least one of the one or more corrosion-inhibiting carbon pigment pigments is a surface-modified carbon pigment.

83. (Currently Amended) The coating system of claim 81 wherein the system further comprises including a topcoat.

84. (Currently Amended) The coating system of claim 81 wherein at least one of the one or more binders coating system is ~~an epoxy-based resin binder~~ a resin-binder system.

85. (Currently Amended) The coating system of claim 81 wherein the coating system is composition and the one or more pretreatment coatings are each independently cured naturally or by exposure to selected from the group consisting of heat a UV coating system, UV energy electrolytic coating system, appliqué, powder coating system, and microwave energy coating system, or combinations thereof.

86. (Currently Amended) The coating system of claim 81 wherein the pretreated substrate is coated by a method of application selected from the group consisting of spraying, brushing, rolling and dipping.

87. (Currently Amended) A coating system comprising:

one or more pretreatment coatings applied to a substrate to form a pretreated substrate;
and

a coating composition according to claim 1 the composition ~~containing an effective corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment~~ further comprising one or more extenders a material selected from the group consisting of an extender a neutral to slightly acidic generating extender, an acidic generating extender, and combinations thereof, and one or more rare earth compounds, one or more additives and combinations thereof, the coating

composition applied to the pretreated substrate.

88. (Currently Amended) The coating system of claim 87 wherein at least one of the corrosion-inhibiting carbon ~~pigment~~ pigments is a surface-modified corrosion-inhibiting carbon pigment.

89. (Currently Amended) The coating system of claim 87 wherein the system further comprises including a topcoat.

90. (Currently Amended) The coating system of claim 87 wherein the coating ~~system is~~ composition and the one or more pretreatment coatings are each independently cured naturally or by exposure to selected from the group consisting of heat a UV-coating system, UV energy electrolytic-coating system, appliqué, powder coating system, and microwave energy coating system, or combinations thereof.

91. (Currently Amended) The coating system of claim 87 wherein the pretreated substrate is coated by a method of application selected from the group consisting of spraying, brushing, rolling and dipping.

92. (Currently Amended) A method of preparing a coating composition according to claim 1, the method comprising:

preparing a ~~paint formulation~~ mill base having one or more binders; and

adding an effective corrosion-inhibiting amount of a one or more corrosion-inhibiting carbon ~~pigment~~ pigments to the ~~paint formulation~~ mill base to produce a the coating composition.

93. (Currently Amended) The method of claim 92 ~~further comprising pre-dispersing wherein~~ the one or more corrosion-inhibiting carbon ~~pigment~~ pigments are pre-dispersed into the binder with a dispersant.

94. (Currently Amended) The method of claim 92 wherein at least one of the one or more

corrosion-inhibiting carbon ~~pigment~~ pigments is a surface-modified corrosion-inhibiting carbon pigment.

95. (Currently Amended) The method of claim 92 wherein the method further comprises ~~comprising~~ adding to the ~~paint formulation~~ mill base one or more materials ~~a material~~ selected from the group consisting of ~~an acidic extender, a neutral extender~~ a neutral to slightly acidic generating extender, an acidic generating extender, one or more rare earth compounds, one or more additives, and combinations thereof.

96. (Currently Amended) A method comprising:
providing a substrate to be coated; and
coating the substrate with a coating composition according to claim 1 ~~having an effective corrosion-inhibiting amount of a corrosion-inhibiting carbon pigment~~.

97. (Currently Amended) The method of claim 96 wherein ~~further comprising pre-dispersing~~ the one or more corrosion-inhibiting carbon ~~pigment~~ pigments ~~are pre-dispersed into the binder~~ with a dispersant.

98. (Currently Amended) The method of claim 96 wherein at least one of the one or more corrosion-inhibiting carbon ~~pigment~~ pigments is a surface-modified corrosion-inhibiting carbon pigment.

99. (Currently Amended) The method of claim 96 wherein the coating composition further contains a material selected from the group consisting of ~~an extender~~ one or more extenders ~~selected from the group consisting of a neutral to slightly acidic generating extender, an acidic generating extender, and combinations thereof~~, one or more rare earth compounds, one or more additives and combinations thereof.

100. (Original) The method of claim 96 wherein the substrate is a pretreated substrate.

101. (Original) The method of claim 100 wherein the pretreated substrate is coated by a method selected from the group consisting of spraying, brushing, rolling and dipping.

102. (Previously Presented) The method of claim 96 wherein the substrate is a composite substrate.

103. (Currently Amended) The method of claim 100 wherein the method further comprises ~~comprising~~ applying a topcoat.

104. (Original) The method of claim 103 wherein the topcoat is a urethane topcoat.

105-111. (Canceled)

112. (Currently Amended) The coating composition of claim 7 1 wherein at least one of the one or more corrosion-inhibiting carbon pigments is crystalline carbon.

113. (Currently Amended) The coating composition of claim 7 1 wherein the corrosion-inhibiting carbon pigments are ~~added~~ present in the composition in a weight percent range of between about 3% to about 25% of total pigment concentration.

114. (Canceled)

115. (Currently Amended) The coating composition of claim 7 24 wherein at least one of the one or more ~~neutral to slightly acidic generating extenders or one or more acidic generating~~ extenders is a sulfate.

116. (Original) The coating composition of claim 115 wherein the sulfate is a metal sulfate.

117. (Currently Amended) The coating composition of claim 116 wherein the metal sulfate is selected from the group consisting of calcium sulfate, calcium hydrogen sulfate, strontium sulfate, ~~magnesium sulfate~~, barium sulfate and combinations thereof.

118. (Currently Amended) The coating composition of claim ~~7~~ 24 wherein at least one of the one or more ~~neutral to slightly acidic generating extenders or one or more acidic generating~~ extenders is a phosphate.

119. (Currently Amended) The coating composition of claim ~~29~~ 5 wherein the ~~one or more~~ rare earth ~~compound~~ compounds is a praseodymium(III) sulfate or a praseodymium(III/IV) oxide.

120. (Currently Amended) The coating composition of claim 57 wherein the ~~extender~~ one or more extenders do not substantially solubilize in the coating composition ~~is substantially soluble~~.

121-122. (Canceled)

123. (Currently Amended) The coating system of claim 87 wherein at least one of the one or more binders is the coating system a resin binder system.

Please add the following new claims:

124. (New) The coating composition of claim 1 further comprising:

one or more extenders selected from the group consisting of a neutral to slightly acidic generating extender, a slightly acidic generating extender, and combinations thereof, present in the composition in a weight percent from between about 25% to about 98% of total pigment concentration; and

one or more rare earth compounds, present in the composition in a weight percent from between about 0.4% to about 26% of total pigment concentration, and wherein

the corrosion-inhibiting carbon pigment is present in the composition in a weight percent from between about 3% to about 25% of total pigment concentration.

125. (New) The coating composition of claim 1 wherein the corrosion-inhibiting carbon pigment is present in the composition in a weight percent of at least about 6% of total pigment concentration.

126. (New) The coating composition of claim 1 wherein the effective corrosion-inhibiting amount of the one or more corrosion-inhibiting carbon pigments is an amount which provides the coating composition with at least a 2, 4 A rating on the Keller Corrosion Rating Scale for a 500 hour salt fog test, as tested according to ASTM B117 procedure.

127. (New) The coating composition of claim 1 wherein the effective corrosion-inhibiting amount of the corrosion-inhibiting carbon pigment is at least about 6 wt%, and the coating composition has at least a 2, 4 A rating on the Keller Corrosion Rating Scale for a 500 hour salt fog test, as tested according to ASTM B117 procedure.

128. (New) The coating composition of claim 1 wherein at least one of the one or more corrosion-inhibiting carbon pigments is a non-conductive carbon pigment.

129. (New) The coating composition of claim 1 wherein at least one of the one or more binders is an inorganic binder.

130. (New) The coating composition of claim 129 wherein the inorganic binder is an inorganic polymer selected from the group consisting of silicone polymers, siloxane polymers, silicate polymers, and combinations thereof.

131. (New) The coating composition of claim 3 wherein the one or more extenders are present in the composition in a weight percent of between about 25% to about 98% of total pigment concentration..

132. (New) The coating composition of claim 131 wherein the one or more extenders are present in the composition in a weight percent of between about 80% to about 95% of total pigment concentration.

133. (New) The composition of claim 26 wherein the calcium sulfate is hydrous calcium sulfate, anhydrous calcium sulfate or combinations thereof.

134. (New) The coating composition of claim 67 wherein the resin binder is an epoxy-based resin binder.

135. (New) The coating composition of claim 76 wherein the resin binder is an epoxy-based resin binder.

136. (New) The coating composition of claim 84 wherein the resin binder is an epoxy-based resin binder.

137. (New) The coating composition of claim 123 wherein the resin binder is an epoxy-based resin binder.

138. (New) The coating composition of claim 87 further comprising one or more additives.

139. (New) A method of preparing a coating composition according to claim 1, the method comprising:

preparing a dispersion of one or more binders;

incorporating one or more corrosion-inhibiting carbon pigments into the one or more binders to form a base composition; and

incorporating an activator into the base composition.

140. (New) The method of claim 139 further comprising incorporating one or more materials selected from the group consisting of a neutral to slightly acidic generating extender, an acidic generating extender, one or more rare earth compounds, and combinations thereof, into the binder to form the base composition.

141. (New) The coating system of claim 63 wherein the system is a water-borne system, a solvent-borne system, a powder system or an appliqué system.

142. (New) The coating system of claim 72 wherein the system is a water-borne system, a

solvent-borne system, a powder system or an appliqué system.

143. (New) The coating system of claim 81 wherein the system comprises a water-borne system, a solvent-borne system, a powder system or an appliqué system, wherein the coating system can be different for the coating composition and the one or more pretreatment coatings.

144. (New) The coating system of claim 87 wherein the system comprises a water-borne system, a solvent-borne system, a powder system or an appliqué system, wherein the coating system can be different for the coating composition and the one or more pretreatment coatings.

145. (New) The coating system of claim 71 wherein the substrate is aluminum, an aluminum alloy, magnesium or a magnesium alloy.

146. (New) The coating system of claim 80 wherein the substrate is aluminum, an aluminum alloy, magnesium or a magnesium alloy.

147. (New) The coating system of claim 63 wherein the coating composition is applied to the substrate by an electrolytic coating method.

148. (New) The coating system of claim 72 wherein the coating composition is applied to the substrate by an electrolytic coating method.

149. (New) The coating system of claim 81 wherein the coating composition, the one or more pretreatment coatings, or both are applied to the substrate by an electrolytic coating method.

150. (New) The coating system of claim 87 wherein the coating composition, the one or more pretreatment coatings, or both are applied to the substrate by an electrolytic coating method.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☐ BLACK BORDERS

☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES

☐ FADED TEXT OR DRAWING

☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING

☐ SKEWED/SLANTED IMAGES

☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS

☐ GRAY SCALE DOCUMENTS

☒ LINES OR MARKS ON ORIGINAL DOCUMENT

☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.